

Date: Thursday, 23/04/2009 3:24:13 PM
 User: Julie Dawson

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : DOUBLER
Job Number : 47418	
Estimate Number : 13849	
P.O. Number :	Part Number : D32945
This Issue : 23/04/2009 S.O. No. :	Drawing Number : D3294 REV.C
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : SMALL /MED FAB	Drawing Revision : C
Previous Run : 47102	Material :
Written By :	Due Date : 01/05/2009 Qty: 20 Um: Each
Checked & Approved By : <u>Julie Dawson</u>	
Comment : Est Rev:A 09-04-08 New issue DD verified by: EC	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
----------------	------------------------------	----------------------

1.0	M2024T3S080	2024-T3 .080 sheet
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Comment: Qty.: 0.0683 sf(s)/Unit Total : 1.3650 sf(s)
 Material: 2024-T3 (QQ-A-250/4) 0.080" thick
 (M2024T3S.080)
 Identify for D3293-1
 Batch: 110394 1B 9-4-08



2.0	WATER JET	FLOW WATER JET
-----	-----------	----------------



Comment: FLOW WATER JET
 1-Cut as per Dwg D3294
 Dwg Rev: C 1B 9-4-08
 Prog Rev: C

****grain direction as per dwg D3294 ****

2-Deburr if necessary 1B 9-4-08

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

4.0	QC8	SECOND CHECK
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Comment: SECOND CHECK

805/04/08

counter



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 23/04/2009 3:24:13 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DOUBLER

Job Number: 47418

Part Number: D32945

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE

1- Deburr if necessary

2- Bend as per Dwg D3294

SB 09/04/30 (32)

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

09/04/30 counter (32)

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

BR 09-04-30 (32)

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

09-05-01 (32)

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: E-A

09/05/01 (32)

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/05/01

Job Completion



MF 09-05-01

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

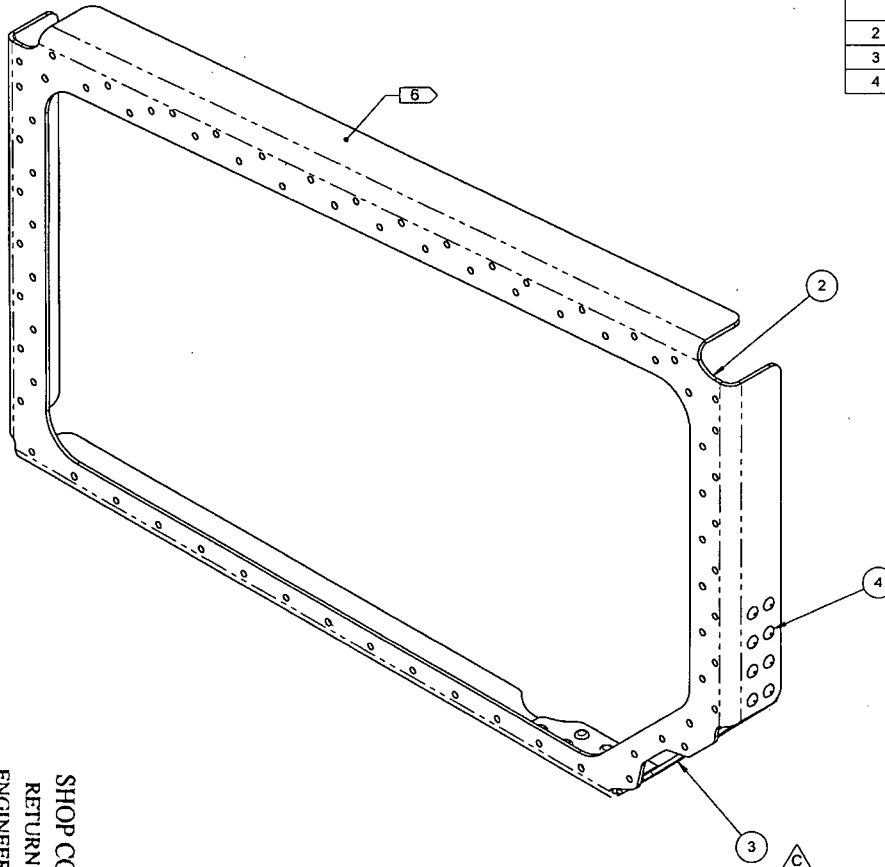
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

ITEM NO.	QTY. -1	PART NUMBER	DESCRIPTION
1	X	D3294-1	BRACKET ASSEMBLY
2	1	D3294-3	BRACKET
3	1	D3294-5	DOUBLER
4	15	MS20470AD4-5	RIVET



D3294-1 BRACKET ASSEMBLY

RELEASED
09/03/24

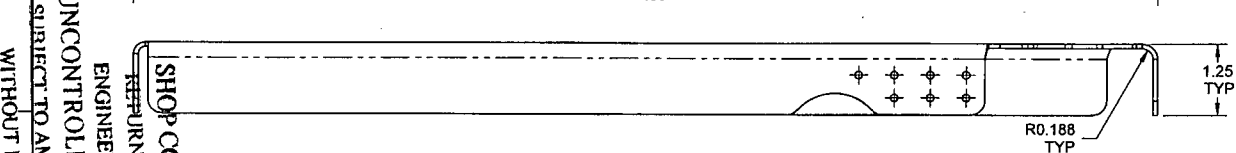
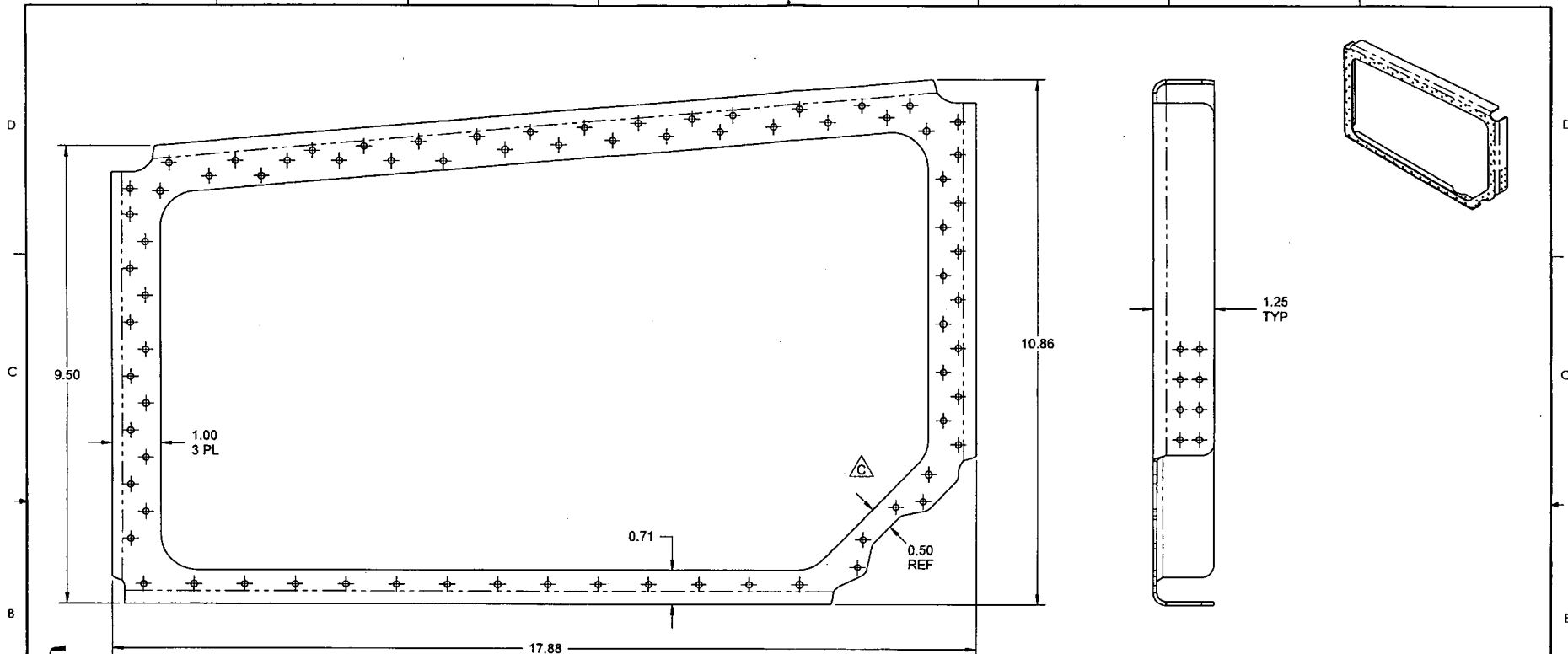
REV.	DESCRIPTION	BY	DATE
C	REMOVE FLANGE PREVIOUSLY ADDED. ADD -5 DOUBLER ZN A4-1, SHEET 5+6.	HS	09.03.24
B	CHANGE FLANGE FROM OUTSIDE TO INSIDE, ZN B4-1, C3-2. CHANGE GRAIN DIRECTION, ZN C4-2	HS	08.09.22
A	NEW ISSUE	CP	04.06.28
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.03.24		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D3294	REV. C SHEET 1 OF 6
TITLE BRACKET	SCALE NTS
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- NOTES:**
- 1) MATERIAL: N/A
 - 2) FINISH: POWDER COAT "BLACK" (4.3.5.7) PER DART QSI 005 4.3
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3294-1 AND B/N" USING FINE POINT PERMANENT INK MARKER
 - 7) WEIGHT: 0.83 lbs

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WITHOUT NOTICE
WORK ORDER
NO. 1418

8 7 6 5 4 3 2 1



D3294-3 BRACKET
MADE FROM D3294-3F

RELEASED
09/04/07

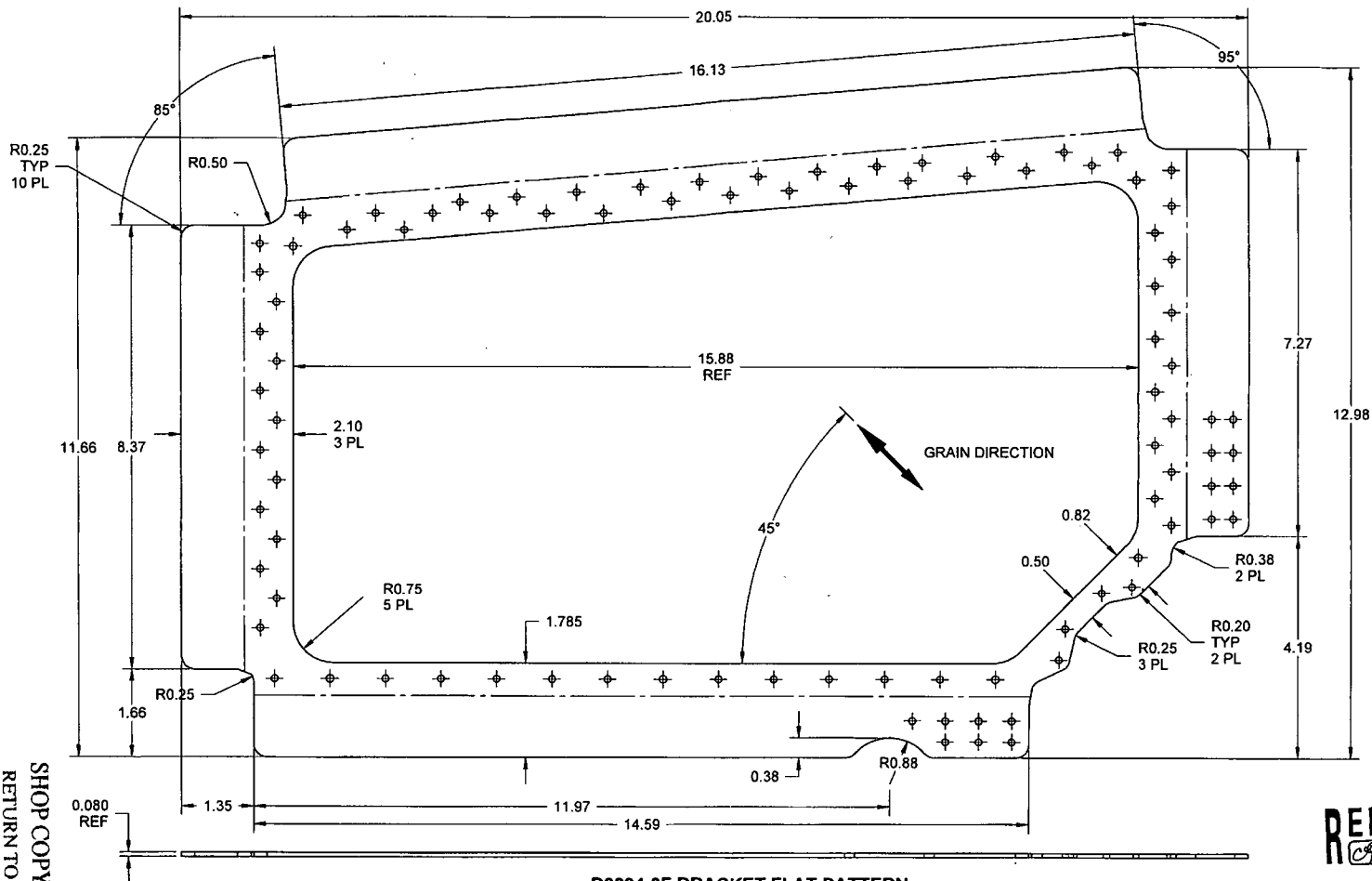
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DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO. D3294	REV. C
MFG. APPR.		SHEET 2 OF 6	
APPROVED		TITLE	SCALE
DE APPR.		BRACKET	NTS
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8 7 6 5 4 3 2 1

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WORK ORDER
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NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.75 lbs



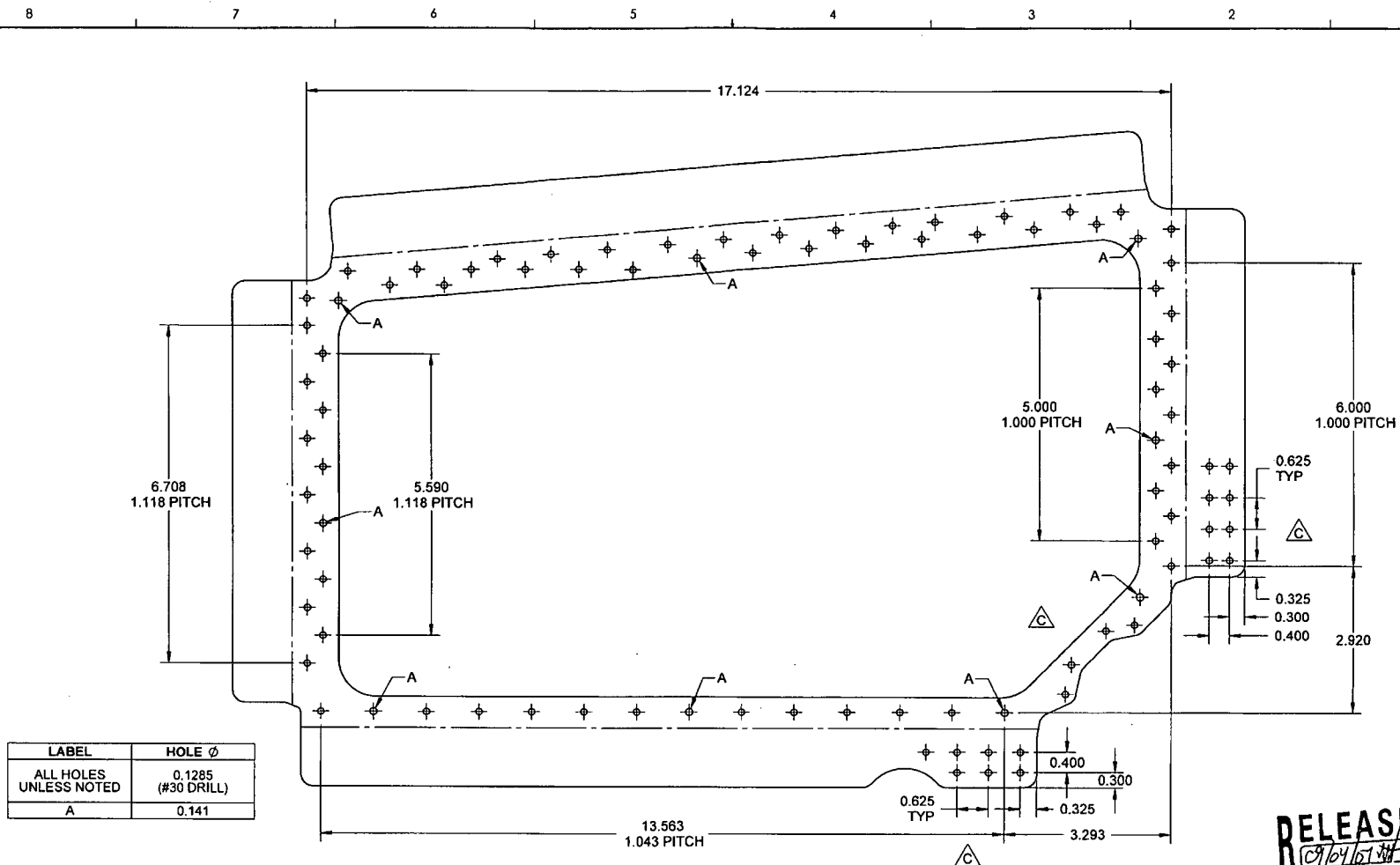
D3294-3F BRACKET FLAT PATTERN

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09/04/07

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MFG. APPR.		D3294	SHEET 3 OF 6
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DE APPR.		BRACKET	NTS
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- NOTES**
- 1) MATERIAL: 2024-T3 ALUMINUM SHEET 0.080 THICK PER AMS-QQ-A-250/4 OR AMS 4037 (REF DART SPEC M2024T3S.080)
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.75 lbs

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LABEL	HOLE ϕ
ALL HOLES UNLESS NOTED	0.1285 (#30 DRILL)
A	0.141

D3294-3F BRACKET FLAT PATTERN
SUPPLEMENTAL

RELEASED
09/04/01

DESIGN	<i>JS</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3294 TITLE BRACKET COPYRIGHT © 2004 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PROPRIETARY AND CONFIDENTIAL AND IS SUPPLIED TO THE CUSTOMER UNDER THE UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMBINED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.</small>	REV. 1
DRAWN	<i>JS</i>		SHEET 4 OF 4
CHECKED	<i>JS</i>		SCALE
MFG. APPR.	<i>JS</i>		NT
APPROVED	<i>JS</i>		
DE APPR.	<i>JS</i>		
DATE 09.03.24			

8 7 6 5 4 3 2 1

D

C

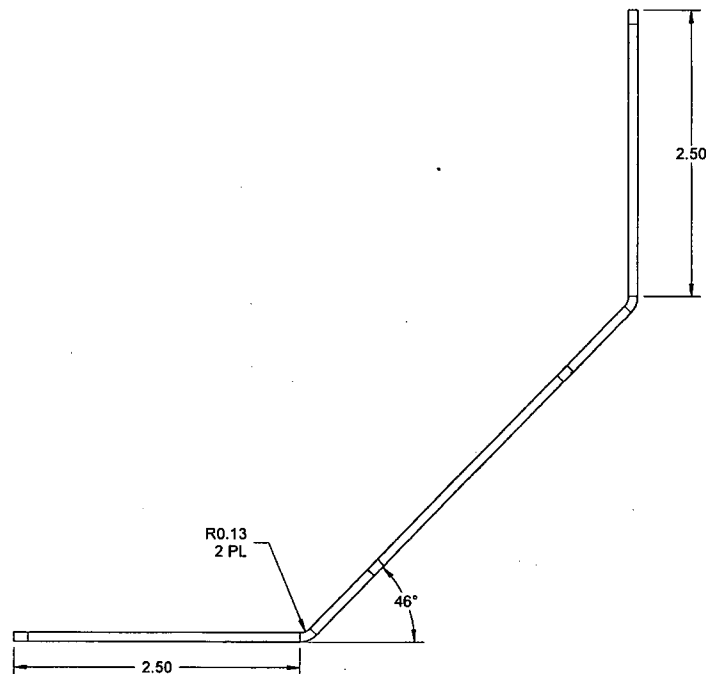
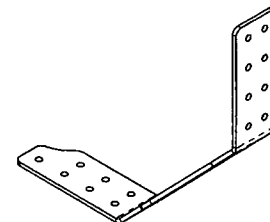
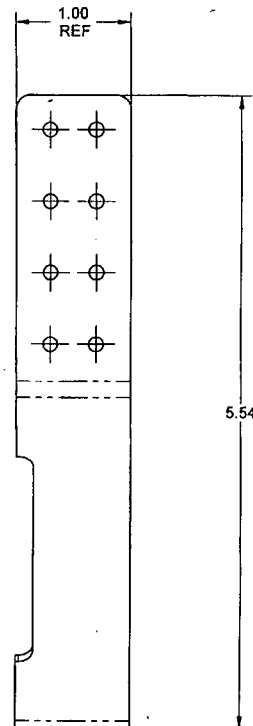
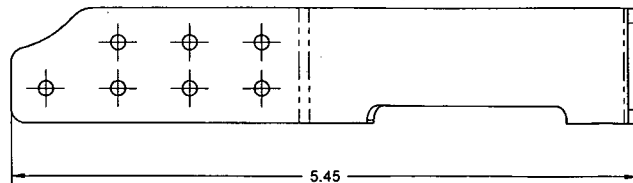
B

D

C

B

A



D3294-5 DOUBLER
MADE FROM D3294-5F



RELEASED
9/21/07

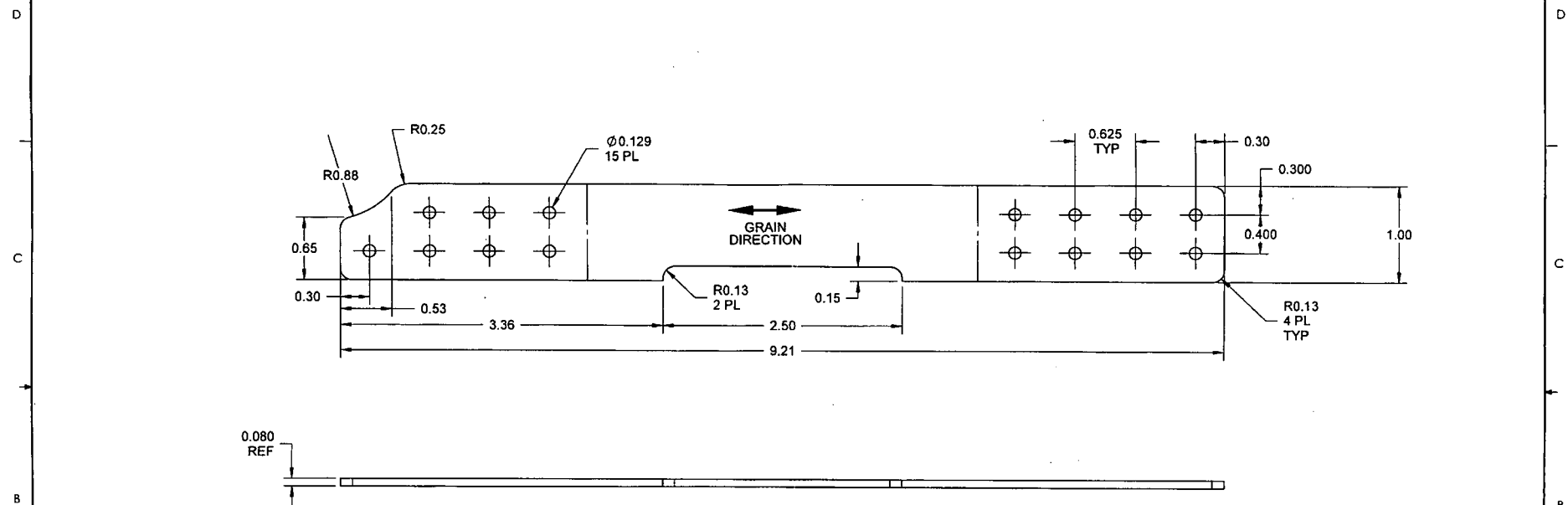
NO. *41918*
WORK ORDER
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- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.07 lbs

DESIGN	<i>AS</i>	DART AEROSPACE LTD	
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8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1



D3294-5F DOUBLER FLAT PATTERN

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09/01/07

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- NOTES:
- 1) MATERIAL: 2024-T3 ALUMINUM SHEET 0.080 THICK PER AMS-QQ-A-250/4 OR AMS 4037 (REF DART SPEC M2024T3S.080)
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.07 lbs

DESIGN		DART AEROSPACE LTD	
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8 7 6 5 4 3 2 1